



```

<400> 3
gcgcctcgag atttccccga aatctagatt tccccgaaat gatttccccg aaatgatttc 60
cccgaaatat ctgccatctc aattag 86

<210> 4
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<221> Primer_Bind
<223> Synthetic sequence complementary to the SV40 promoter; includes a
Hind III restriction site.

<400> 4
gcggcaagct ttttgcaaag cctaggc 27

<210> 5
<211> 271
<212> DNA
<213> Artificial Sequence

<220>
<221> Protein_Bind
<223> Synthetic promoter for use in biological assays; includes GAS
binding sites found in the IRF1 promoter (Rothman et al., Immunity
1:457-468 (1994)).

<400> 5
ctcgagatttt ccccgaaatc tagattttccc cgaaatgatt tccccgaaat gatttccccg 60
aaatatctgc catctcaatt agtcagcaac catagtcccc cccctaactc cgcccatccc 120
gcccctaact ccgcccagtt ccgcccattc tccgcccatt ggctgactaa ttttttttat 180
ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagtagt gaggaggctt 240
ttttggaggc ctaggctttt gcaaaaagct t 271

<210> 6
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<221> Primer_Bind
<223> Synthetic primer complementary to human genomic EGR-1 promoter
sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a
Xho I restriction site.

<400> 6
gcgctcgagg gatgacagcg atagaacccc gg 32

<210> 7
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<221> Primer_Bind
<223> Synthetic primer complementary to human genomic EGR-1 promoter
sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a
Hind III restriction site.

<400> 7
gcgaagcttc gcgactcccc ggatccgcct c 31

<210> 8

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<211> 12  
 <212> DNA  
 <213> Homo sapiens

<400> 8  
 ggggactttc cc 12

<210> 9  
 <211> 73  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <221> Primer\_Bind  
 <223> Synthetic primer with 4 tandem copies of the NF-KB binding site (GGGGACTTTCCC), 18 nucleotides complementary to the 5' end of the SV40 early promoter sequence, and a XhoI restriction site.

<400> 9  
 gcggcctcga ggggactttc ccggggactt tccggggact ttccgggact ttccatcctg 60  
 ccattctcaat tag 73

<210> 10  
 <211> 256  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <221> Protein\_Bind  
 <223> Synthetic promoter for use in biological assays; includes NF-KB binding sites.

<400> 10  
 ctcgagggga ctttcccggg gactttccgg ggactttccg ggactttcca tctgccatct 60  
 caattagtca gcaaccatag tcccgcctcc aactccgccc atcccgcctc taactccgcc 120  
 cagttccgcc catttccgc cccatggctg actaattttt tttatttatg cagaggccga 180  
 ggccgcctcg gcctctgagc tattccagaa gtagtgagga ggcttttttg gaggcctagg 240  
 cttttgcaaa aagctt 256

<210> 11  
 <211> 1388  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> (1388)..(1388)  
 <223> n equals a,t,g, or c

<400> 11  
 cgggtcgacc caccggtccg gtccctagga gataagagta tcttgacacag caggtgcagg 60  
 tttcccagca gctcaggcaa gagtccgatg tttgtgccat ctgatacctga tgtctggaga 120  
 gatagccatg tgtgagcctg aatttggaac tgacaaggcc agggagccga gcgtgggtgg 180  
 caggtggcga gtgtcctggg acgaacggtt tgtgcagcca tgtctggtcg aactgctggg 240  
 ctctgctctc ttcattctca tcgggtgcct gtcggtcatt gagaatggga cggacactgg 300  
 gctgctgcag ccggccctgg cccacgggct ggctttgggg ctctgtgattg ccacgctggg 360  
 gaatatcagt ggtggacact tcaaccctgc ggtgtccctg gcagccatgc tgatcggagg 420  
 cctcaacctg gtgatgtccc tcccgactcg ggtctcacag ctgctcgggg ggatgctcgg 480  
 ggctgccttg gccaaaggcg tgagtcctga ggagaggttc tggaatgcat ctggggcggc 540  
 ctttgtgaca gtccaggagc aggggcagggt ggcaggggagc ttggtggcag agatcatcct 600  
 gacgacgtg ctggccctgg ctgtatgcat ggtgtccatc aatgagaaga caaagggcc 660  
 tctggccccg ttctccatcg gctttgccgt caccgtggat atcctggctg ggggccctgt 720  
 gtctggaggc tgcataaact ccgcccgtgc ttttggacct gcggtggtgg ccaaccactg 780  
 gaacttccac tggatctact ggctggggccc actcctggct ggcctgcttg ttggactgct 840  
 cattaggtgc ttcattggag atgggaagac ccgcctcatc ctgaaggctc agtgaagcag 900  
 agctcgtggg attcctgctg ctccagggtg cctcagctca cctgtcccag actgaggaca 960

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ggggagttcc tgcatttcct gccagggcag agggccagag gagcgacccc ctgcttccac 1020
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cctttgtgct catcagagac cccagcctgg ggaacacgct gcccgactg cccagagagc 1140
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gggggcctgg ccacttcctt gcttctcaag ctgacaattc tgcactttgc aataaatagt 1320
ccagtgtttc cttccaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1380
aaaaaaaaa

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<210> 12
<211> 1478
<212> DNA
<213> Homo sapiens

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<400> 12
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tggaacaaaa tatcacttta gaacgacctt ctgctgtaga actcacatgt cagttcacaa 240
cttctgggga tgtgaattca gtaaatgtga cttggaaaaa aggggatgaa caacttaaga 300
attaccatgt cagtgccaca gaaggcatcc tgtataccca gtacaagttt tccatcatta 360
atagcgaaca actgggaagc tattcttgtt tctttgaaga ggaaaaggaa cgaaggggca 420
catttaattt cggagtcctt gaagttcaga gaaaaacaa accattgatc acttatgtgg 480
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acagtggtaa taggagtgtg caggttcttc ttgatgttca catgaatgaa aagtatgcga 600
tcaatggaac aaacgcgaat gaaacaaggc ttaagataat gcagctttca gaagacgata 660
aaggatctta ttggtgccat gcaatgttcc agttgggcga gagccaagaa agtgttgaac 720
tggttgtgat aagttatttt gtgcccctca aacctttct tggaatagtt gttgaagtta 780
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tggatgatgg gaaagaattt gaacaagttg aacagttgaa atcagacgat agcaacggca 900
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gtagttttgc aataatacct gctatctcag atccaaagat atattttcct tctgtgatta 1140
ttttacatta aagcaaggta aatcatatta aatatgttct atgagctata acccaggata 1200
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acttttttgc catttgccct gggttttttt ctaattatgc ttactatgtg tagaaatatt 1380
tgtaataatt ttcattgtaat ggtcacctc tgtcatattg gataaaaaa tctttattaa 1440
gaaatgaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa

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<210> 13
<211> 1684
<212> DNA
<213> Homo sapiens

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<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

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<220>
<221> misc_feature
<222> (18)..(18)
<223> n equals a,t,g, or c

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<220>
<221> misc_feature
<222> (63)..(63)
<223> n equals a,t,g, or c

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<400> 13
ncggcgcgac cccccantt ttaatgacgc ctgccgtccg gtcgggaatt cccgggtcga 60
ccnccgctcc ggcgggaccg gtttgcgga agattctgtg gacaatcacc atgggaagca 120
aaggaggctt catccttctg ctcatcctcg ctgtgctctg ccgttcagggt catagcctga 180
catgctacgc ctgtattgac cgtgaaacct gcaacaagac cactgtttgt tcagttaatc 240

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atgacgcgtg	tctgttggtc	aaagctgac	caaaactttt	ttaccgccag	tgttgaagt	300
ttgatgactg	cagctacctc	tctatctcca	aagccctggg	gctgaagaag	ctccagtaca	360
gctgttgcca	gaaggacctg	tgcaacggga	gtgccagggt	ctctgggatg	acagcgttga	420
tgctgtcccc	cttgctggcg	gcagccttga	cgctttgtct	ctaaatcaac	accgggaggc	480
cttctcctaa	actttccgtg	tctccgtata	ctccttattt	ccttggctgc	tgcatgcccc	540
cagctttatt	tcacctgtcc	cgttgggcaa	gactaacact	agtttgggca	acttggtgac	600
aagagaggct	ctgagagacg	ttgaaggcca	gtcctgtggg	cagcgaagac	ccgtcggagg	660
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gcttttcaca	agagcagcct	cgaggggaca	gcttgsgtac	ctcagatcct	ctgcagggcc	780
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tgtgaaaatt	attccttcaa	cttttgcac	agattgggtg	ggtatcttgg	ctttgtcaca	1260
cgcagttaaa	gtctkaacgt	tgggacactc	tgtaaaaaat	aactcgtagt	ggggcacctg	1320
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aaaa						1684

<210> 14  
 <211> 1173  
 <212> DNA  
 <213> Homo sapiens

<400> 14						
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ggagctgtga	atgtgatgga	gacaagattt	agtgtatagc	tctgctacct	gcctggtgtt	120
cctttgagtt	tctttatcct	tagatttgac	agctgagaaa	tctaggtgga	ttcatattcg	180
taatcattga	ttaacatgca	catttgggtt	tgcacatttt	tgtttatcat	acatttttct	240
ccgtttttct	ttaaagaaca	tgctctaggg	gaactattaa	tagcccacca	gtcgggtagg	300
cagcattcaa	tccttctatg	ccttctttcg	ccacctgttg	aggtctttct	tctgaaacaa	360
agaagaaata	gacaaatcag	acttgccctc	ttggaaatgt	ggtccagatt	tctctactcc	420
caagctccaa	aaaaggcata	cattggatgg	gctagatcaa	ctcctcctga	gagccataaa	480
tccgccaaaga	gttggttttcc	atgtaagggt	gtggtacaat	ggggaacgcc	tgatgttgga	540
ggaaagcagg	aggacttttag	agtggagtgt	cattctaate	tctctgccgc	ttcaactatg	600
tgacctgggg	caaatgatata	aaactctatg	agcctctttc	cttatcttta	aaatgaagag	660
aagtaatacc	tacctgttag	ggctgtttgt	aggattaaat	gaagtaatgc	atacagtgc	720
taacaaagta	tttaacatca	tattttttaa	aagctcatga	aatattagtt	tttcttctt	780
cccctctttc	tattttctct	cctgttccct	tttctctccc	tcctctgccc	tctccttctt	840
tcagatgtta	gtctaaaaca	gcaccttgga	tctaagcagc	acctttgaga	aagaaaagac	900
tgtttcaaga	atgtctagtt	gcacctcctt	tccgtatgtg	gcctaaatgc	ctaggttgga	960
tcaatagttt	aattttttta	ttgaactggt	taatatggac	tatggactta	cattcacttt	1020
tactgttttc	tgtatatatta	cttttgcttg	aagtgtttta	atattgacta	tttacctctg	1080
ctcattttta	ttgattttct	gtattttttc	aatgaaaatt	ataataaaaa	ttatttttgt	1140
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaa			1173

<210> 15  
 <211> 1013  
 <212> DNA  
 <213> Homo sapiens

<400> 15						
ggtgacatcc	cagtgcctccg	cgtgcaggca	aggcacacct	gaagcgtgcc	atcctggggc	60
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gggctgtgat	ctcccagacg	ctgcagcgct	cactggccaa	gtatgcggag	ctcgaccgtg	180
aggatgactt	ctgtgaggct	gccgaggccc	cggacatcca	gcctaagacc	caccgaagc	240
cagaggccag	gatgccacgc	ctgtcccagg	ggaagggggc	tgacatcttc	catcggtctg	300
ggccccctgt	tgtgtttctc	gccaaagaacc	gggtggcggt	gggtggggccc	gtccacttga	360
cccgaggaga	ggggggcttt	ggcctcacgc	ttcgggggaga	ctcgcctgtc	ctcatcgctg	420

ccgtcattcc	agggagccag	gccgcggcgg	ctggcctgaa	ggagggcgac	tacattgtgt	480
cagtgaatgg	gcagccatgc	aggtggtgga	gacacgcgga	ggtggtgacg	gagctgaagg	540
ctgcgggaga	ggcgggcgcc	agcctgcagg	tgtgtgcgct	gctgcccagc	tctagactgc	600
ccagcttggg	ggaccgcggg	cccgtcctgc	tgggccccag	ggggcttcta	aggagccaga	660
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ggagccgaaa	ggcccagcag	ggcaagactg	gaggctgccc	cagccctgtg	ccccagtga	780
gccagctccg	ccctcatcct	tgaagcacc	aggttgggccg	tgagggccag	gatccctgca	840
cgcctcagcc	ctggctccag	ctggcagcaa	gcaccgagca	tgccctcccc	acccagagga	900
cctccgggca	atgcctgtcc	cgctcatgc	tggaggctgc	ctcgggcacc	tgcttgccca	960
ttaaagactg	gtcagacctg	aaaaaaaaa	aaaaaaaaa	aaaaaaaaa	aaa	1013

<210> 16  
 <211> 1616  
 <212> DNA  
 <213> Homo sapiens

<400> 16						
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agttgcaaac	aaatgtatag	ttttcaaaaa	gaagcaactt	ttttgctccc	cagttttattc	180
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ccccctctcc	cacccatagg	agcaggtttt	gagagtaaca	gaatgaagtg	aaaatgacac	360
tgtgccagtt	ctaagaccag	ccctcaaagg	ttcatgtgtt	tctgcttgct	ttcactgtat	420
ttgaaatgtt	gctgtgagaa	agacatctct	gaaacagctg	aatggctcta	agaaaaggat	480
gagagatgca	gggagcagag	ctcccaactg	aggccagcct	agatcaccta	agagccaggc	540
cccagtttta	ctctcatgtg	taagcaataa	atgcttacc	cagcaatacc	accaagggtt	600
gtggttggtt	tatatacagc	attaatgtgg	caatagggtc	aatacacctc	gttaaacaaa	660
ccatacacat	atgactctaa	ccctaatacat	aaattgatcc	agtctgttca	gttccacaac	720
gctgtttcct	ccagaatctc	acagatgact	tactaaatcc	aacacaaata	cacctcagac	780
tttctgtcta	gctcccaacc	agttaaaagc	aattctaaat	attttttttc	ttagtcgtag	840
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aagcatgaga	gcccagctgt	caaagtcate	tagacccctc	tcagaaggctc	attaaatttg	960
tctattttcac	aggattgcaa	gataaaatac	agaatgcccc	gttgaatttg	aacttcggat	1020
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tttttatatt	gtttatctga	cgttcaagct	aactgggcat	cctgtatttt	tcttagctaa	1140
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aggaaatttt	ggtaatgtca	tcattactct	ctacattatt	attatgacgg	ttacaattgt	1500
taaatctagg	tgggtgggtat	gtgggttata	ttgtacatga	tttttaactt	gtctgcatgt	1560
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<210> 17  
 <211> 963  
 <212> DNA  
 <213> Homo sapiens

<400> 17						
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atagagaata	gttatgtggt	gacactactt	caagagaacc	tctgcattcc	agtcatacca	360
atcctgcaac	ttgattttca	gaagtcaaga	gtatatcgcg	ataagacagt	gcacagggtg	420
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ccctgcatta	tggaaaatgt	ctctcagcat	tgctttatta	caaagtaaa	gatgggttta	600
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gaacttgaaa	ttgtcggaat	atgtgtctct	ttcatgtcat	attcaataga	agtttctagt	780
ttaaagattg	ttttgtgttt	tcttaggcat	ttcaagtgc	aagcaaaagta	aatgtatata	840
ttatgtgata	aatcatgttt	tcaagaaaaa	aaaaaaaaa	aaaaaaaaa	aaaaaaaaa	900

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 960  
aaa 963

<210> 18  
<211> 1369  
<212> DNA  
<213> Homo sapiens

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ctgaggagag aagtgaagtg tgggaaactt ggggaccctg taggagcgct atgaaggttc 180  
agaaggttgt ggtgctcccc ttgcttgaag tgcagtgggc agttcttgag cccccaata 240  
agcctcagaa ccaccttcat tagtttttga cccctcttac caaggattgt ggcagaaagg 300  
aagatgttac caagtatttc agtgaattcc ccaatgcagg ggaacggatg ttgaactcca 360  
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ttttcggcag atggactttg agtttgctgc atggcagatg ctctacctat ttacttcccc 480  
acagagagtt tacagaaatt ttcatattcg aaagcagaca aaggatcaat gggccagaga 540  
tgacctgtct ttcttggtcc tgttaagtat ttggctctgt gtgtccacta taggatttgg 600  
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&lt;211&gt; 1167

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 23

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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<212> DNA
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<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
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ggggaaaaaa	aaaaaaaaaa	aa				862

<210> 35  
 <211> 1499  
 <212> DNA  
 <213> Homo sapiens

<400> 35						
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tgggggtagc	agccctctct	tcagcactga	cttctgtatc	atgtcaggga	tttttagggc	180
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tgactttctg	aggtcacaga	cggagcctca	ccccatccaa	ggcgggtgcc	tggactccca	300
ctgtgtctcc	cagagggcag	ggtgagtgcg	tggcatcctt	ttggcgggcg	tgggtgcctc	360
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gcagcaggga	ttggctgaaa	tcatatgcag	agcccaagag	gcaggggaaa	ggcggcaatt	600
tcagggtccc	tttgttcgcc	aggtacctgg	ggcccagccc	gggcggcagg	agggactcag	660
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<210> 36  
 <211> 2791  
 <212> DNA  
 <213> Homo sapiens

<400> 36						
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gcatagacaa	gcttaacatt	gtagatgttt	ctcttcaaaa	atcatcttaa	acatttgcac	180
ttggaattgt	gttaaataga	atgtgtgaaa	cactgtatta	gtaaacttca	tcacctttct	240
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gcaaattaat	ttaacacctg	ccaaaaaaag	gctgctgttg	gcttatcagt	tgtctttaaa	360
ttcaaatgct	catgtgactt	ttatcacatc	aaaaaatatt	tcattaatga	ttcaccttta	420
gctctgaaaa	ttaccgctgt	tagtaattat	agtgggctta	taaaaacatg	caactctttt	480
tgatagttat	ttgagaattt	tgggtgaaaa	tatttagctg	agggcagtat	agaacttata	540
aaccaatata	ttgatatttt	taaaacattt	ttacatataa	gtaaactgcc	atctttgagc	600
ataactacat	ttaaaaataa	agctgcata	ttttaaatca	agtgtttaac	aagaatttat	660
attttttatt	ttttaaaatt	aaaaataatt	tatatcttct	ctgttgcatg	aggattctca	720
tctgtgctta	taatgggttag	agatttttatt	tgtgtggaat	gaagtgaggc	ttgtagtcac	780

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<210> 37
<211> 1013
<212> DNA
<213> Homo sapiens
```

```
<210> 38
<211> 718
<212> DNA
<213> Homo sapiens
```

<400> 38  
ggcacgagac cccctgcccc cgtgaccttg acccacactg gcttgggagc agggatcttc 60

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<210> 39
<211> 374
<212> DNA
<213> Homo sapiens
```

```
<210> 40
<211> 1410
<212> DNA
<213> Homo sapiens
```

```
<210> 41
<211> 1493
<212> DNA
<213> Homo sapiens
```

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<400> 41
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taactttctg ctgactgctt cacctcttac aagtctgccc atcccgaag taatgatgac      120
aaaatactcc aaccttttct tggaaagtca taacatctca ctgactgaac attccagtgt      180
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gccagtggaa	aaaaatatca	ctttagaacg	acctttctgct	gtagaactca	catgtcagtt	240
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taagaattac	catgtcagtg	ccacagaagg	catcctgtat	accaggtaca	agttttccat	360
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<210> 42

<211> 1557

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> (1)..(1)

<223> n equals a,t,g, or c

<220>

<221> misc\_feature

<222> (9)..(9)

<223> n equals a,t,g, or c

<220>

<221> misc\_feature

<222> (1347)..(1347)

<223> n equals a,t,g, or c

<220>

<221> misc\_feature

<222> (1527)..(1527)

<223> n equals a,t,g, or c

<220>

<221> misc\_feature

<222> (1533)..(1533)

<223> n equals a,t,g, or c

<400> 42

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ctgtggagct	gtgaatgtga	tggagacaag	atttagtgta	tagctctgct	acctgcctgg	180
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ttcgtaatca	ttgattaaca	tgcacatttg	ggtttgcaca	tttttgttta	tcatacattt	300
ttctccgttt	tctattaaag	aacatgctct	aggggaaacta	ttaatagccc	accagtcggg	360
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acaaagaaga	aatagacaaa	tcagacttgc	cctcttggaa	atgtggtcca	gatttctcta	480
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tggaggaaag	caggaggact	ttagagtggg	gttgcatctt	aatctctctg	ccgcttcaac	660
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ttgttaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaag	gcgggccgctc	tagaggatcc	1260
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&lt;210&gt; 43

&lt;211&gt; 1013

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 43

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ggcccctgtc	tgtgttctca	gccaaagaacc	ggtggcggtc	ggtggggccc	gtccacctga	360
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cctccgggca	atgcctgtcc	cgcctcatgc	tggaggctgc	ctcgggcacc	tgcctgcca	960
ttaaagactg	gtcagacctg	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaa	1013

&lt;210&gt; 44

&lt;211&gt; 986

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; (131)..(131)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 44

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caggcgccggc	gaatggtgac	agagacgtcc	cgcaggcgga	gaatacaaga	gcttgaagaa	120
cgccgcagga	ntttcgtgga	agcctgcaga	gcaaggggaag	cagcgtttga	tgccgaatat	180
cagcgaaatc	ctcacagggt	ggacctcgat	attttaacct	ttacgatagc	tctgactgcc	240
tctgaagtta	tcaacctctt	gatagaagaa	cttggttgcg	ataagtttat	caatagagaa	300
tagttagggtg	gtgacactac	ttcaagagaa	cctctgcatt	ccagtcatac	caatcctgca	360
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aagcattata	actgtaacgt	tctttgagtt	tgtgattgat	ccacattttt	ccccctgcat	540
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gaacagaata	agatgttaac	gctgagttat	taggactgga	aggctatgaa	aagaacttga	720
aattgtcgga	atatgtgctc	tcttcatgtc	atattcaata	gaagtttcta	gtttaagatt	780
gattttgtgt	tttcttaggc	atttcaagtg	ataagcaaa	taaatgtata	tattatgtga	840
taaatcatgt	tttcaagaac	gtcaaatatt	tggacttttt	tctttcaatt	tttaattttt	900
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986

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<210> 45
<211> 810
<212> DNA
<213> Homo sapiens
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<400>	45						
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ttttttgttt	gtttgtaata	gcacatccca	gagacatcag	aaaccagcaa	ctgattcagt		420
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taaaaacacc	accaaaagaaa	ataaatatat	cctacttgaa	attttactcta	tggacttacc		660
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tatatatgca	tatacatatc	cacacttgtc	tgcaagaata	ttgattaaaa	ttgctaaatt		780
tgtacttggtt	caaaaaaaaa	aaaaaaaaaa					810

```
<210> 46
<211> 880
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (864)..(865)
<223> n equals a,t,g, or c
```

```
<220>
<221> misc_feature
<222> (868)..(868)
<223> n equals a,t,g, or c
```

```
<220>  
<221> misc_feature  
<222> (878)..(878)  
<223> n equals a,t,g, or c
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<400>	46						
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tttaaaaaata	gaggacttgt	tcacagtatg	ctctaagtct	cacactggag	ttttgtgcaa		240
cataaagtga	gtgattttgg	agcagagcga	agtctagaaa	tttgccctaa	attatttgtg		300
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gttttaattg	atgcttaaat	tgttaaaaat	atgtactgtg	ttttaagta	ttctaattgt		540
gctttttttg	accactttca	gtatgaaaaa	tgtcagtatt	tagttccctt	ctcaggcaca		600
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aaagtctcta	aggaagtatc	ctcttctgtg	taaaactggg	acaagttgac	taccaaaaaa		840
aaaaaaaaaa	aqccgaqgkq	qcnngntncc	aaqqccntg				880

```
<210> 47
<211> 1668
<212> DNA
<213> Homo sapiens
```

<400> 47

```
<210> 48
<211> 851
<212> DNA
<213> Homo sapiens
```

```
<210> 49
<211> 511
<212> DNA
<213> Homo sapiens
```

<400>	49						
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tccattataa	tcaatattgt	agcattcatt	cattcattat	tcattcactt	accatttatt		120
gaagccttaa	atttgtgtct	agtcagtga	ctgtgaattg	gtataaagag	acaactaaga		180
atctgatcat	tgctcgttgg	gagagactga	cggtacaaag	tgcaatggta	catgcattct		240

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gtgagacaga aattcatgga ggagaactgg aagagattca cctggatagg tagcctgggg 300
cataaagagt aggcctagga agccctaagg acattaggat ttattttgag agatgatggt 360
tgctttgtta gggtgacagc aggggtggtga tgaagagagg tcttaatcta aatatatttt 420
aaaggtggag ctaacaaatt ttgtggcatg aaatcaaaga gaacatttta gataggcttt 480
aaagattttg gagccaagca caatgactca t 511

```

```

<210> 50
<211> 817
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (778)..(778)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc_feature
<222> (791)..(791)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc_feature
<222> (801)..(801)
<223> n equals a,t,g, or c

```

```

<400> 50
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ttattgcttc atgcttcaat gcactgtttt aaaataactgt ttaatttggt aaaggtgtga 180
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agcccagctt ggacttggtg agaagcaggc tgataaaaga accaaatatt gtacattttg 540
aagaagttgc ccgctgactt gagagagagg tgttgcgttt caggtgctga atgtccttat 600
aaaaagttga atatttcgag catctctatc aatacatttg aatgctgaga gcttttcctt 660
ccagaagctc atgtcatttt caacacacac ttctatttac ctttatgtag tttctaaaaa 720
ttgaaaacca gaattggagg tttttttaaa aaaaaagccg aggkgggnaa 780
agtamaaatg ngcctkwgcc ntctcctttc cccgtcc 817

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<210> 51
<211> 762
<212> DNA
<213> Homo sapiens

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<400> 51
ggcacgaggt ttgttttcct cagctgaggc aagtggtaga gtatacagga taacgaagta 60
acatgtaaaa ggcaggacgc acataaaggt gtacatggct attgtttcac ctggagaaac 120
cacatgattg ggacctgaag gtttactgac tgactacagg ggctgattgt gaagcacgag 180
gaaccccatg tgtgtggaga ctgtaggggtg agagcacaca attattagca tcatctctga 240
gtgatctcac agattttttt tcttgtgttt gttttgcttt ttgacaactg cttctccac 300
gttccttgca attctattct ctacacctca ctttactatt tgtattcgat ggaccaggat 360
aattcaggca aggttacctt gtaaacctga attggccaca caccatgttg taccacagct 420
ggctatgaag tgaataatgg tactgaaagt aaacctgaag acctttctca gatctatttt 480
aagtctgagt ctgaccaacc atggaaaata ttcgacatga attaatgtag agaactataa 540
agcatttatg acagctccaa gaaaaatcat ctactctatg caggagatat gtttagagac 600
ctctcagaaa aacttgccctg gtttgagggt acacagtacc attttaatct tctgaaaata 660
tctgtattcc tgctcttttt ctgctgtcac tgtcaatctg ctatattttt cactatccta 720
ttaaaatatt actgtctcct ttaaaaaaaaa aaaaaaaaaa aa 762

```

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<210> 52
<211> 1417
<212> DNA
<213> Homo sapiens

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<220>
<221> misc_feature
<222> (1378)..(1378)
<223> n equals a,t,g, or c
```

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<220>
<221> misc_feature
<222> (1392)..(1392)
<223> n equals a,t,g, or c
```

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<220>
<221> misc_feature
<222> (1399)..(1399)
<223> n equals a,t,g, or c
```

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<220>
<221> misc_feature
<222> (1404)..(1404)
<223> n equals a,t,g, or c
```

```
<400> 52
tgagaccctg tctcaataat aataataata ataataatag taataatgaa gtaaattggga      60
taaggaaaga argataatta tcttttaaagg ttgattoccca ccctccctcc ccagttactt      120
aaggaaactaa gtgagtacat ctccagttgc ccatgaaagc ataagtttgt tttcctcagc      180
tgaggcaagt ggtagagtat acaggataac gaagtaacat gtaaaaggca ggacgcacat      240
aaaggtgtac atggctattg tttcacctgg agaaaccaca tgattgggac ctgaagggtt      300
actgactgac tacaggggct gattgtgaag cacgaggaac cccatgtgtg tggagactgt      360
aggggtgagag cacacaatta ttagcatcat ttctgagtga tctcacagat tttttttctt      420
gtgtttgttt tgctttttga caactgcttc tcccacgttc cttgcaattc tattctctca      480
ccttcacttt actatttgta ttcatgtggc caggataatt caggcaagggt taccttgtaa      540
acttgaattg gccacacacc atgttggtcac ccagctggct atgaagtga taatggtact      600
gaaagttaaac ctgaagacct ttctcagatc tattttaagt ctgagtctga ccaaccatgg      660
aaaatatctg acatgaatta atgttagagaa ctataaagca tttatgacag ctccaagaaa      720
aatcatctac tctatgcagg agatatgttt agagacctct cagaaaaact tgcctgggtt      780
gagggtacac agtaccattt taatcttctg aaaatatctg tattcctgct ctttttctgc      840
tgtcactgtc aatctgctat atttttcact atcctattaa aatattactg tctcctttat      900
ctgttcaatg tccatatttt aaaaaaatct tccttgatag agctattctg atccaaataa      960
tttctctgat atttctctat atggctccca caacaatttc attgttgtaa gcatatctat      1020
ttctccatac attgtaaaac tgtaatcctt aggtatttct aaaacataaa gaggagaatt      1080
aagtcagctg cagaacaatg gggctgawtc yctgctttt tctctggaaa atctttcatt      1140
gcttttggtg gaaattttacc tagagggttac aaccacagga tgtagcttgg tctcttattt      1200
gccttttttg gaaaccaatt aagatttaata caggataaag gaaaaaagca atctattcat      1260
tatataacac agttgtttgt attacttggt ccctgc aaag gcaaatctgt tgaatgcttg      1320
cattttggaa ttcttttcta ataggaacaa ccaaaaaagg gcttcttatg ggtgcagncg      1380
ggaaaaaagg tncattttnt tggnttgcac tcttaac                                1417
```

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<210> 53
<211> 2793
<212> DNA
<213> Homo sapiens
```

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<220>
<221> misc_feature
<222> (2793)..(2793)
<223> n equals a,t,g, or c
```

```
<400> 53
ccacgcgtcc ggattacatg tagttattga gaatcctttc gaattcagtg gcttaatcat      60
gaatgtctaa atattgttga cattaggatg atacatgtaa attaaagtta catttgttta      120
gcatagacaa gcttaacatt gtagatgttt ctcttcaaaa atcatcttaa acatttgcac      180
ttggaattgt gttaaataga atgtgtgaaa cactgtatta gtaaaacttca tcacctttct      240
acttccttat agtttgaact tttcagtttt tgtagttccc aaacagttgc tcaattttaga      300
gcaaaattat ttaacacctg ccaaaaaaag gctgctgttg gcttatcagt tgtcttttaa      360
ttcaaatgct catgtgactt ttatcacatc aaaaaatatt tcattaatga ttcaccttta      420
gctctgaaaa ttaccgcgtt tagtaattat agtgggctta taaaaacatg caactctttt      480
```

tgatagttat	ttgagaat	tggtgaaaa	tatttagctg	agggcagtat	agaacttata	540
aaccaatata	ttgatatt	taaaacatt	ttacatataa	gtaaactgcc	atctttgagc	600
ataactacat	ttaaaaata	agctgcatat	ttttaaatca	agtgtttaac	aagaatttat	660
atTTTTtatt	ttttaaaat	aaaaataatt	tatatTTcct	ctgTTgcatg	aggattctca	720
tctgtgctta	taatggttag	agattTTtatt	tgtgtggaat	gaagtgaggc	ttgtagtcat	780
ggTTtctagt	tttcagTTtg	ccaagtctgt	ttactgcagt	gaaattcatc	aaatgTTtca	840
gtgtggTTTT	ctgtagccta	tcatttTactg	gctattTTTT	tatgtacacc	tttaggattt	900
tctgcctact	ctatccagtt	gtccaaatga	tatcctacat	tttacaaatg	ccctttcagt	960
ttctattttt	tttttccatt	aaattgccc	catgtcctaa	tgtgcagttt	gtaagtgtgt	1020
gtgtgtgtgt	ctgtgtgtgt	gtgaatttga	ttttcaagag	tgctagactt	ccaatttgag	1080
agattaaata	atttaattca	ggcaaacatt	tttcattgga	atttcacagt	tcattgtaat	1140
gaaaatgtta	atcctggatg	acctttgaca	tacagtaatg	aatcttgga	attaatgaat	1200
ttgttagtag	catcttgatg	tgtgttttaa	tgagtatttt	tcaaagtgtg	gcattaaacc	1260
aaagttggca	tactgggaag	gtttatatca	agttccattt	ggctactgat	ggacaaaaaa	1320
tagaaatgcc	ttcctatgga	gagtattttt	cccttaaaaa	attaaaaagg	ttaattattt	1380
tgaaaaaaaa	aaatcgaccc	acgcgtccgg	attacatgta	gttattgaga	atcctttcga	1440
attcagtggc	ttaatcatga	atgtctaaat	attgttgaca	ttaggatgat	acatgtaaat	1500
taaaagtaca	ttgttttagc	atagacaagc	ttaacattgt	agatgtttct	cttcaaaaat	1560
catcttaaac	atttgcattt	ggaattgtgt	taaatagaat	gtgtgaaaca	ctgtattagt	1620
aaacttcac	acctttctac	ttccttatag	tttgaacttt	tcagtttttg	tagttcccaa	1680
acagttgctc	aatttagagc	aaattaattt	aacacctgcc	aaaaaaaggc	tgctgtgggc	1740
ttatcagttg	tctttaaatt	caaatgctca	tgtgactttt	atcacatcaa	aaaaatattt	1800
attaatgatt	caacttttagc	tctgaaaatt	accgcgttta	gtaattatag	tgggcttata	1860
aaaacatgca	actccttttg	atagttattt	gagaattttg	gtgaaaaata	tttagctgag	1920
ggcagtatag	aacttataaa	ccaatatatt	gatattttta	aaacattttt	acataataag	1980
aaactgccat	ctttgagcat	aactacattt	aaaaataaag	ctgcatattt	ttaaatcaag	2040
tgtttaacaa	gaatttatat	tttttatttt	ttaaaattaa	aaataattta	tatttcctct	2100
gttgcatgag	gattctcatc	tgtgcttata	atggttagag	attttatttg	tgtggaatga	2160
agtgaggctt	gtagtcatgg	ttctagtgtt	tcagtttgcc	aagtctgttt	actgcagtga	2220
aattcatcaa	atgtttcagt	gtgstyttct	gtagyctatc	attttactggc	tattttttta	2280
tgtcaccttt	taggattttc	tgcctactct	atccagttgt	ccaaatgata	tcctacattt	2340
tacaaaatgcc	ctttcagttt	ctattttctt	tttccattaa	attgccctca	tgtcctaattg	2400
tgcagtttgt	aagtgtgtgt	gtgtgtgtct	gtgtgtgtgt	gaatttgatt	ttcaagagtg	2460
ctagactttc	aatttgagag	attaaataat	ttaattcagg	caaacatttt	tcattggaat	2520
ttcacagttc	attgtaatga	aaatgttaat	cctggatgac	ctttgacata	cagtaatgaa	2580
tcttgatat	taatgaattt	gttagtagca	tcttgatgtg	tgttttaatg	agttattttc	2640
aaagttgtgc	attaaaccaa	agttggcata	ctggaagtgt	ttatatcaag	ttccatttgg	2700
ctactgatgg	acaaaaaata	gaaatgcctt	cctatggaga	gtatttttcc	tttaaaaaat	2760
taaaaaggtt	aattattttt	aaaaaaaaaa	acn			2793

<210> 54  
 <211> 393  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> (214)..(214)  
 <223> n equals a,t,g, or c

<400> 54						
aattcggcac	gagagcttat	tcattgaagg	agtaagtggc	tgctcactcc	tttctgctga	60
aactctttcc	tgtccttgta	gcctagtgtg	gaatgggagc	agggtcacag	tgaaagagct	120
gaatctcccc	acccacccac	actgcagcag	gctgcggctg	gccgacttgt	taattgccga	180
gcaggaacac	agcagcaagc	tgcgggcacc	cctnacttgc	tacagttgat	ggctgtgtgt	240
ctctcccagg	acctagagaa	aaccgscctt	gtgtacgagc	gcatacactat	cggcacattg	300
ttcatgtcct	tcatgaacgr	gtaaactgct	gtttccgtgg	rttttcaaaa	aaaaaaaaaa	360
aaaaaaaaaa	aaaaaaaaag	ctcgagggtg	ggc			393

<210> 55  
 <211> 261  
 <212> PRT  
 <213> Homo sapiens

<400> 55  
 Met Ser Gly Glu Ile Ala Met Cys Glu Pro Glu Phe Gly Asn Asp Lys

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      1             5             10             15
Ala Arg Glu Pro Ser Val Gly Gly Arg Trp Arg Val Ser Trp Tyr Glu
      20             25             30
Arg Phe Val Gln Pro Cys Leu Val Glu Leu Leu Gly Ser Ala Leu Phe
      35             40             45
Ile Phe Ile Gly Cys Leu Ser Val Ile Glu Asn Gly Thr Asp Thr Gly
      50             55             60
Leu Leu Gln Pro Ala Leu Ala His Gly Leu Ala Leu Gly Leu Val Ile
      65             70             75             80
Ala Thr Leu Gly Asn Ile Ser Gly Gly His Phe Asn Pro Ala Val Ser
      85             90             95
Leu Ala Ala Met Leu Ile Gly Gly Leu Asn Leu Val Met Leu Leu Pro
      100            105            110
Tyr Trp Val Ser Gln Leu Leu Gly Gly Met Leu Gly Ala Ala Leu Ala
      115            120            125
Lys Ala Val Ser Pro Glu Glu Arg Phe Trp Asn Ala Ser Gly Ala Ala
      130            135            140
Phe Val Thr Val Gln Glu Gln Gly Gln Val Ala Gly Ala Leu Val Ala
      145            150            155            160
Glu Ile Ile Leu Thr Thr Leu Leu Ala Leu Ala Val Cys Met Gly Ala
      165            170            175
Ile Asn Glu Lys Thr Lys Gly Pro Leu Ala Pro Phe Ser Ile Gly Phe
      180            185            190
Ala Val Thr Val Asp Ile Leu Ala Gly Gly Pro Val Ser Gly Gly Cys
      195            200            205
Met Asn Pro Ala Arg Ala Phe Gly Pro Ala Val Val Ala Asn His Trp
      210            215            220
Asn Phe His Trp Ile Tyr Trp Leu Gly Pro Leu Leu Ala Gly Leu Leu
      225            230            235            240
Val Gly Leu Leu Ile Arg Cys Phe Ile Gly Asp Gly Lys Thr Arg Leu
      245            250            255
Ile Leu Lys Ala Gln
      260

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<210> 56
<211> 310
<212> PRT
<213> Homo sapiens

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<400> 56
Met Met Thr Lys Tyr Ser Asn Leu Ser Leu Glu Ser His Asn Phe Ser
  1             5             10             15
Leu Thr Ala Ser Pro Leu Thr Ser Leu Pro Ile Pro Glu Val Met Met
      20             25             30
Thr Lys Tyr Ser Asn Leu Phe Leu Glu Ser His Asn Ile Ser Leu Thr
      35             40             45

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Glu His Ser Ser Val Pro Val Glu Lys Asn Ile Thr Leu Glu Arg Pro  
 50 55 60  
 Ser Ala Val Glu Leu Thr Cys Gln Phe Thr Thr Ser Gly Asp Val Asn  
 65 70 75 80  
 Ser Val Asn Val Thr Trp Lys Lys Gly Asp Glu Gln Leu Lys Asn Tyr  
 85 90 95  
 His Val Ser Ala Thr Glu Gly Ile Leu Tyr Thr Gln Tyr Lys Phe Ser  
 100 105 110  
 Ile Ile Asn Ser Glu Gln Leu Gly Ser Tyr Ser Cys Phe Phe Glu Glu  
 115 120 125  
 Glu Lys Glu Arg Arg Gly Thr Phe Asn Phe Gly Val Pro Glu Val Gln  
 130 135 140  
 Arg Lys Asn Lys Pro Leu Ile Thr Tyr Val Gly Asp Ser Val Val Leu  
 145 150 155 160  
 Val Cys Lys Cys Arg His Cys Ala Pro Leu Asn Trp Thr Trp Tyr Ser  
 165 170 175  
 Gly Asn Arg Ser Val Gln Val Pro Leu Asp Val His Met Asn Glu Lys  
 180 185 190  
 Tyr Ala Ile Asn Gly Thr Asn Ala Asn Glu Thr Arg Leu Lys Ile Met  
 195 200 205  
 Gln Leu Ser Glu Asp Asp Lys Gly Ser Tyr Trp Cys His Ala Met Phe  
 210 215 220  
 Gln Leu Gly Glu Ser Gln Glu Ser Val Glu Leu Val Val Ile Ser Tyr  
 225 230 235 240  
 Leu Val Pro Leu Lys Pro Phe Leu Gly Ile Val Val Glu Val Ile Leu  
 245 250 255  
 Leu Val Ala Ile Ile Leu Phe Cys Glu Met His Thr Gln Lys Lys Lys  
 260 265 270  
 Met His Met Asp Asp Gly Lys Glu Phe Glu Gln Val Glu Gln Leu Lys  
 275 280 285  
 Ser Asp Asp Ser Asn Gly Ile Glu Asn Asn Ala Pro Arg His Arg Lys  
 290 295 300  
 Asn Glu Ala Met Ser Gln  
 305 310

<210> 57  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 57  
 Met Gly Ser Lys Gly Gly Phe Ile Leu Leu Leu Ile Leu Ala Val Leu  
 1 5 10 15  
 Cys Arg Ser Gly His Ser Leu Thr Cys Tyr Ala Cys Ile Asp Arg Glu  
 20 25 30

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<210> 58
<211> 135
<212> PRT
<213> Homo sapiens
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<210> 59
<211> 257
<212> PRT
<213> Homo sapiens
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<400> 59  
His Pro Ser Ala Pro Arg Ala Gly Lys Ala His Leu Lys Arg Ala Ile  
1 5 10 15  
Leu Gly Gln Glu Ala Leu Arg Leu His Ala Leu Cys Arg Val Leu  
20 25 30

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<210> 60
<211> 72
<212> PRT
<213> Homo sapiens

<400> 60
Met Tyr Ser Phe Gln Lys Glu Ala Thr Phe Leu Leu Pro Ser Leu Phe
   1                               5                   10           15
Leu Val Ser Ser Pro Arg Leu Ala Ile Ala Ile Gly Ile Val Met Ala
                20                       25               30
Ser Ile Leu Ser Leu Leu His Pro Tyr Leu Leu Leu Cys Asp Phe Ala
      35                     40             45
Ala Pro Leu Ile Lys Glu Ala Glu Pro Pro Leu Pro Pro Ile Gly Ala
    50                 55              60
```

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<400> 62
Met Asp Phe Glu Phe Ala Ala Trp Gln Met Leu Tyr Leu Phe Thr Ser
  1           5           10           15

Pro Gln Arg Val Tyr Arg Asn Phe His Tyr Arg Lys Gln Thr Lys Asp
          20           25           30

Gln Trp Ala Arg Asp Asp Pro Ala Phe Leu Val Leu Leu Ser Ile Trp
          35           40           45

Leu Cys Val Ser Thr Ile Gly Phe Gly Phe Val Leu Asp Met Gly Phe
  50           55           60

Phe Glu Thr Ile Lys Leu Leu Leu Trp Val Val Phe Ile Asp Cys Val
  65           70           75           80

Gly Val Gly Leu Leu Ile Ser Thr Leu Met Trp Phe Ile Ser Asn Lys
          85           90           95

Tyr Leu Val Lys Arg Gln Ser Arg Asp Tyr Asp Val Glu Trp Gly Tyr
          100          105          110

Ala Phe Asp Val His Leu Asn Ala Phe Tyr Pro Leu Leu Val Ile Leu
          115          120          125

His Phe Ile Gln Leu Phe Phe Ile Asn His Val Ile Leu Thr Asp Thr
          130          135          140

Phe Ile Gly Tyr Phe Val Gly Asn Thr Leu Trp Leu Val Ala Val Gly
  145          150          155          160

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Tyr Tyr Ile Tyr Val Thr Phe Leu Gly Tyr Ser Ala Leu Pro Phe Leu  
                     165                    170                    175

Lys Asn Thr Val Ile Leu Leu Tyr Pro Phe Ala Pro Leu Ile Leu Leu  
                     180                    185                    190

Tyr Gly Leu Ser Leu Ala Leu Gly Trp Asn Phe Thr His Thr Leu Cys  
                     195                    200                    205

Ser Phe Tyr Lys Tyr Arg Val Lys  
           210                    215

<210> 63  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 63  
 Met Met Val Ser Cys Ala Cys Glu His Leu Leu Glu Leu Arg Gly Leu  
       1                    5                    10                    15

Thr Thr Ser Thr Arg Trp Pro Trp Leu Val Pro His Thr Gly Leu Val  
           20                    25                    30

Leu Lys Ile Arg Ser Pro Arg Gln Gly Glu Pro Gly Ala Pro Pro Leu  
           35                    40                    45

Ser Val Cys Leu Ser Pro Val Val Ser Leu Cys Cys Cys Leu Cys Leu  
           50                    55                    60

Cys Phe Cys Leu Ser Val Ala Met Ser Leu Val Ile Phe Leu Cys Pro  
           65                    70                    75                    80

Ala Ala Ile Ser Ala Leu Val Thr Ser Thr Leu Leu Ser Pro Arg Asp  
           85                    90                    95

Ala Thr His Trp Gly Ser Val Gly Glu Ile Ala Leu Gly Pro His Ala  
           100                    105                    110

Ser Ile Pro Gly Trp Leu Cys Leu Pro Val Ser Leu His Val Ser Pro  
           115                    120                    125

Cys Val Phe Leu Ser Val Ser Leu Thr Gly Arg Asp Ala Glu  
           130                    135                    140

<210> 64  
 <211> 367  
 <212> PRT  
 <213> Homo sapiens

<400> 64  
 Met Ser Ser Asn Gly Ile Pro Glu Cys Tyr Ala Glu Glu Asp Glu Phe  
       1                    5                    10                    15

Ser Gly Leu Glu Thr Asp Thr Ala Val Pro Thr Glu Glu Ala Tyr Val  
           20                    25                    30

Ile Tyr Asp Glu Asp Tyr Glu Phe Glu Thr Ser Arg Pro Pro Thr Thr  
           35                    40                    45

Thr Glu Pro Ser Thr Thr Ala Thr Thr Pro Arg Val Ile Pro Glu Glu

50					55					60					
Gly 65	Ala	Ile	Ser	Ser	Phe 70	Pro	Glu	Glu	Glu	Phe 75	Asp	Leu	Ala	Gly	Arg 80
Lys	Arg	Phe	Val	Ala 85	Pro	Tyr	Val	Thr	Tyr 90	Leu	Asn	Lys	Asp	Pro 95	Ser
Ala	Pro	Cys	Ser	Leu 100	Thr	Asp	Ala	Leu 105	Asp	His	Phe	Gln	Val	Asp 110	Ser
Leu	Asp	Glu 115	Ile	Ile	Pro	Asn	Asp 120	Leu	Lys	Lys	Ser	Asp 125	Leu	Pro	Pro
Gln 130	His	Ala	Pro	Arg	Asn	Ile 135	Thr	Val	Val	Ala	Val 140	Glu	Gly	Cys	His
Ser 145	Phe	Val	Ile	Val	Asp 150	Trp	Asp	Lys	Ala	Thr 155	Pro	Gly	Asp	Val	Val 160
Thr	Gly	Tyr	Leu	Val 165	Tyr	Ser	Ala	Ser	Tyr 170	Glu	Asp	Phe	Ile	Arg 175	Asn
Lys	Trp	Ser	Thr 180	Gln	Ala	Ser	Ser	Val 185	Thr	His	Leu	Pro	Ile 190	Glu	Asn
Leu	Lys	Pro 195	Asn	Thr	Arg	Tyr	Tyr 200	Phe	Lys	Val	Gln	Ala 205	Gln	Asn	Pro
His 210	Gly	Tyr	Gly	Pro	Ile	Ser 215	Pro	Ser	Val	Ser	Phe 220	Val	Thr	Glu	Ser
Asp 225	Asn	Pro	Leu	Leu	Val 230	Val	Arg	Pro	Pro	Gly 235	Gly	Glu	Pro	Ile	Trp 240
Ile	Pro	Phe	Ala	Phe 245	Lys	His	Asp	Pro	Ser	Tyr 250	Thr	Asp	Cys	His 255	Gly
Arg	Gln	Tyr	Val 260	Lys	Arg	Thr	Trp	Tyr 265	Arg	Lys	Phe	Val	Gly 270	Val	Val
Leu	Cys	Asn 275	Ser	Leu	Arg	Tyr	Lys 280	Ile	Tyr	Leu	Ser	Asp 285	Asn	Leu	Lys
Asp 290	Thr	Phe	Tyr	Ser	Ile	Gly 295	Asp	Ser	Trp	Gly	Arg 300	Gly	Glu	Asp	His
Cys 305	Gln	Phe	Val	Asp	Ser 310	His	Leu	Asp	Gly	Arg 315	Thr	Gly	Pro	Gln	Ser 320
Tyr	Val	Glu	Ala	Leu 325	Pro	Thr	Ile	Gln	Gly 330	Tyr	Tyr	Arg	Gln	Tyr 335	Arg
Gln	Glu	Pro	Val	Arg 340	Phe	Gly	Asn	Ile 345	Gly	Phe	Gly	Thr	Pro 350	Tyr	Tyr
Tyr	Val	Gly 355	Trp	Tyr	Glu	Cys	Gly 360	Val	Ser	Ile	Pro	Gly 365	Lys	Trp	

&lt;210&gt; 65

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 65

Met Met Tyr Cys Ile Leu Lys Tyr Ser Asn Cys Ala Phe Leu Tyr His  
 1 5 10 15

Leu Gln Tyr Glu Lys Cys Gln Tyr Leu Val Pro Phe Ser Gly Thr Ile  
 20 25 30

Arg Phe Leu Leu Thr Leu Phe Ser Pro Leu Thr His Val Ile Ser His  
 35 40 45

Ser Asn Gln Glu Ser Arg Glu  
 50 55

&lt;210&gt; 66

&lt;211&gt; 46

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 66

Met Thr Leu Asn Val Val Asp Ala Ile Ser Ala Cys Gln Arg Gly Gly  
 1 5 10 15

Phe Leu Gln Ser Val Gln Ser Thr Glu Thr Met Val Arg Val Val Phe  
 20 25 30

Leu Ile Leu Phe Leu Val Gly Gln Gln Glu Pro Phe Pro Ile  
 35 40 45

&lt;210&gt; 67

&lt;211&gt; 49

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 67

Met Ser Thr Ile Ile Met Val Leu Tyr Ser Arg Ser Lys Cys Ile His  
 1 5 10 15

Phe Ser Tyr Leu Thr Glu Asn Leu Tyr Leu Leu Thr Asn Ile Ser Leu  
 20 25 30

Val Pro Pro Ser Pro Pro Leu Val Thr Thr Ile Ile Phe Phe Ser Phe  
 35 40 45

Phe

&lt;210&gt; 68

&lt;211&gt; 50

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 68

Met Leu Asn Phe Leu Trp Gly His Ser Leu Ile Val Pro Ala Ala Ala  
 1 5 10 15

Thr Gly Ala Ser Leu Glu Ala Ala Cys Ala Lys Thr Thr Gln Leu Ser  
 20 25 30

Leu Gly Ser His Pro Arg Ala Phe Phe Ala Ser Arg Ser Gly Asp Leu  
 35 40 45

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Met Thr Met Leu Gln Val Tyr Val Leu Ile Pro Leu Phe Val Ile Ile
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Leu Glu Cys Thr Pro Thr Asn Tyr Lys Lys Glu Lys Val Asn Cys Lys
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Lys Ala Ser Gly Arg Ser Phe Arg Arg His Ser Arg Arg Arg His Cys
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Tyr His Arg Arg  
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<212> PRT  
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Met Arg Gly Lys Phe Pro His Asp Leu Leu Cys Phe Leu Ile Lys Leu  
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Leu Cys Pro Thr Ile Ala Gly Ser Ala Tyr Gly Cys Cys Asn Val Gly  
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Ser Ala Val Ser Cys Ser Tyr His Phe  
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<212> PRT  
<213> Homo sapiens

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Met Arg Gly Leu Ser Gln Phe Tyr Gly Phe Lys Tyr His Leu Asn Ala  
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Trp Asp Thr Gln Met Tyr Ile Pro Asn Ser Asp Cys Pro Pro Asn Ser  
20 25 30  
Lys Leu Ile Tyr Pro Asn Tyr Leu Phe Gln Ser Pro Leu Gly Tyr Leu  
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Ile Ile Met Ser His Leu Asp His Ala Asn Ser Ser Gln Ser Arg  
50 55 60

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<213> Homo sapiens

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Met Arg Cys Thr Pro Gly Phe Gly Leu Gly Thr Ser Gly Phe Ser Gln  
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Gly Arg Leu Glu Val Glu Thr Ser Thr Cys Val Thr Val Val  
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1 5 10 15



His Pro Gly Ala Ser Val Ser Gly Tyr Thr Gln His Phe Ala Thr Cys  
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 Gly Pro Ala Gly Ala Glu Asp Gly Gly Glu Glu Ala Ser Ser Pro Cys  
 65 70 75 80  
 Val Tyr Cys Arg Gln Lys Gly Leu Val Phe Trp Phe Trp Gly Phe Cys  
 85 90 95  
 Phe Val Cys Val Leu Phe Gly Leu Phe Val Phe  
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 Trp Ile Glu Glu Ser Arg Gly Val Met Arg Val Pro Ser Gly Leu Gly  
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 Ser Leu Leu Leu Val Ser Asp Pro Pro Phe Ser Ser Gln Ala Leu  
 35 40 45  
 Gly Ala Pro Gly Ser Glu Asp Ser Trp Glu Ser Ser Leu Arg Gln Val  
 50 55 60  
 Gln Gly Gln Ser Ser Asp Pro Gly Pro Gly Leu Leu Trp Val Pro Met  
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 Asn Ser Ala Ser Gly Ser Glu Gln Phe Pro Ala Pro Leu Pro Glu Pro  
 85 90 95  
 Ser Val Leu Trp Asn Pro Trp Ala Gly  
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 Trp His Thr Gly Ser Val Tyr Ile Lys Phe His Leu Ala Thr Asp Gly  
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 Gln Lys Ile Glu Met Pro Ser Tyr Gly Glu Tyr Phe Ser Phe Lys Lys  
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 Leu Lys Arg Leu Ile Ile Leu Lys Lys Lys Asn Arg Pro Thr Arg Pro  
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 Asp Tyr Met  
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 Met Leu Trp Arg Cys Phe Val Ile Phe Lys Ile Cys Pro Tyr Cys Leu  
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 Phe Lys Thr Pro Lys Ile Met Asn Ser Glu Thr His Pro Ala Gln Arg  
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 Val Leu Asp Lys Gly Leu  
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 Gly Thr Arg Pro Pro Ala Pro Val Thr Leu Thr His Thr Gly Leu Gly  
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                   20                  25                  30  
 Ala Ala Tyr Ser Tyr Phe Arg Ile Asn Arg Arg Thr Ile Gly Phe Gln  
                   35                  40                  45  
 His Phe Glu Ser Glu Glu Asp Ile Asn Val Ala Ala Leu Gly Lys Gln  
           50                  55                  60  
 Gln Pro Glu Asn Ile Ser Asn Pro Leu Tyr Glu Ser Thr Thr Ser Ala  
           65                  70                  75                  80  
 Pro Pro Glu Pro Ser Tyr Asp Pro Phe Thr Asp Ser Glu Glu Arg Gln  
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 Leu Glu Gly Asn Asp Pro Leu Arg Thr Leu  
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 His Glu Ser Leu Phe Ile Glu Gly Val Ser Gly Cys Ser Leu Leu Ser  
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 Ala Glu Thr Leu Ser Cys Pro Cys Ser Leu Val Trp Asn Gly Ser Arg  
                   20                  25                  30  
 Val Thr Val Lys Glu Leu Asn Leu Pro Thr His Pro His Cys Ser Arg  
           35                  40                  45  
 Leu Arg Leu Ala Asp Leu Leu Ile Ala Glu Gln Glu His Ser Ser Lys  
           50                  55                  60  
 Leu Arg His Pro Tyr Leu Leu Gln Leu Met Ala Val Cys Leu Ser Gln  
           65                  70                  75                  80

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Asp Leu Glu Lys Thr Arg Leu Val Tyr Glu Arg Ile Thr Ile Gly Thr  
                             85                            90                            95

Leu Phe Ser Val Leu His Glu Arg Val Asn Cys Cys Phe Arg Gly Phe  
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Ser Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys  
                             115                            120

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 Met Ser Gly Glu Ile Ala Met Cys Glu Pro Glu Phe Gly Asn Asp Lys  
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Ala Arg Glu Pro Ser Val Gly Gly Arg Trp Arg Val Ser Trp Tyr Glu  
                             20                            25                            30

Arg Phe Val Gln Pro Cys Leu Val Glu Leu Leu Gly Ser Ala Leu Phe  
                             35                            40                            45

Ile Phe Ile Gly Cys Leu Ser Val Ile Glu Asn Gly Thr Asp Thr Gly  
                             50                            55                            60

Leu Leu Gln Pro Ala Leu Ala His Gly Leu Ala Leu Gly Leu Val Ile  
       65                            70                            75                            80

Ala Thr Leu Gly Asn Ile Ser Gly Gly His Phe Asn Pro Ala Val Ser  
                             85                            90                            95

Leu Ala Ala Met Leu Ile Gly Gly Leu Asn Leu Val Met Leu Leu Pro  
                             100                            105                            110

Tyr Trp Val Ser Gln Leu Leu Gly Gly Met Leu Gly Ala Ala Leu Ala  
                             115                            120                            125

Lys Ala Val Ser Pro Glu Glu Arg Phe Trp Asn Ala Ser Gly Ala Ala  
       130                            135                            140

Phe Val Thr Val Gln Glu Gln Gly Gln Val Ala Gly Ala Leu Val Ala  
       145                            150                            155                            160

Glu Ile Ile Leu Thr Thr Leu Leu Ala Leu Ala Val Cys Met Gly Ala  
                             165                            170                            175

Ile Asn Glu Lys Thr Lys Gly Pro Leu Ala Pro Phe Ser Ile Gly Phe  
                             180                            185                            190

Ala Val Thr Val Asp Ile Leu Ala Gly Gly Pro Val Ser Gly Gly Cys  
                             195                            200                            205

Met Asn Pro Ala Arg Ala Phe Gly Pro Ala Val Val Ala Asn His Trp  
       210                            215                            220

Asn Phe His Trp Ile Tyr Trp Leu Gly Pro Leu Leu Ala Gly Leu Leu  
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Val Gly Leu Leu Ile Arg Cys Phe Ile Gly Asp Gly Lys Thr Arg Leu  
                             245                            250                            255

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Leu	Thr	Ala	Ser	Pro	Leu	Thr	Ser	Leu	Pro	Ile	Pro	Glu	Val	Met	Met	
			20					25					30			
Thr	Lys	Tyr	Ser	Asn	Leu	Phe	Leu	Glu	Ser	His	Asn	Ile	Ser	Leu	Thr	
		35					40					45				
Glu	His	Ser	Ser	Val	Pro	Val	Glu	Lys	Asn	Ile	Thr	Leu	Glu	Arg	Pro	
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Ser	Ala	Val	Glu	Leu	Thr	Cys	Gln	Phe	Thr	Thr	Ser	Gly	Asp	Val	Asn	
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Ser	Val	Asn	Val	Thr	Trp	Lys	Lys	Gly	Asp	Glu	Gln	Leu	Lys	Asn	Tyr	
				85					90					95		
His	Val	Ser	Ala	Thr	Glu	Gly	Ile	Leu	Tyr	Thr	Gln	Tyr	Lys	Phe	Ser	
			100					105					110			
Ile	Ile	Asn	Ser	Glu	Gln	Leu	Gly	Ser	Tyr	Ser	Cys	Phe	Phe	Glu	Glu	
		115					120					125				
Glu	Lys	Glu	Arg	Arg	Gly	Thr	Phe	Asn	Phe	Gly	Val	Pro	Glu	Val	Gln	
	130					135					140					
Arg	Lys	Asn	Lys	Pro	Leu	Ile	Thr	Tyr	Val	Gly	Asp	Ser	Val	Val	Leu	
145					150					155					160	
Val	Cys	Lys	Cys	Arg	His	Cys	Ala	Pro	Leu	Asn	Trp	Thr	Trp	Tyr	Ser	
				165					170					175		
Gly	Asn	Arg	Ser	Val	Gln	Val	Pro	Leu	Asp	Val	His	Met	Asn	Glu	Lys	
			180					185					190			
Tyr	Ala	Ile	Asn	Gly	Thr	Asn	Ala	Asn	Glu	Thr	Arg	Leu	Lys	Ile	Met	
		195					200					205				
Gln	Leu	Ser	Glu	Asp	Asp	Lys	Gly	Ser	Tyr	Trp	Cys	His	Ala	Met	Phe	
	210					215					220					
Gln	Leu	Gly	Glu	Ser	Gln	Glu	Ser	Val	Glu	Leu	Val	Val	Ile	Ser	Tyr	
225					230					235					240	
Leu	Val	Pro	Leu	Lys	Pro	Phe	Leu	Gly	Ile	Val	Val	Glu	Val	Ile	Leu	
				245					250					255		
Leu	Val	Ala	Ile	Ile	Leu	Phe	Cys	Glu	Met	His	Thr	Gln	Lys	Lys	Lys	
		260						265					270			
Met	His	Met	Asp	Asp	Gly	Lys	Glu	Phe	Glu	Gln	Val	Glu	Gln	Leu	Lys	
		275					280					285				
Ser	Asp	Asp	Ser	Asn	Gly	Ile	Glu	Asn	Asn	Ala	Pro	Arg	His	Arg	Lys	

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Asn Glu Ala Met Ser Gln  
305 310

<210> 86  
<211> 135  
<212> PRT  
<213> Homo sapiens

<400> 86  
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Phe Ser Ile Lys Glu His Ala Leu Gly Glu Leu Leu Ile Ala His Gln  
20 25 30  
Ser Gly Arg Gln His Ser Ile Leu Leu Cys Leu Leu Ser Pro Pro Val  
35 40 45  
Glu Val Phe Leu Leu Lys Gln Arg Arg Asn Arg Gln Ile Arg Leu Ala  
50 55 60  
Leu Leu Glu Met Trp Ser Arg Phe Leu Tyr Ser Gln Ala Pro Lys Lys  
65 70 75 80  
Ala Tyr Ile Gly Trp Ala Arg Ser Thr Pro Pro Glu Ser His Lys Ser  
85 90 95  
Ala Lys Ser Cys Phe Pro Cys Lys Gly Val Val Gln Trp Gly Thr Pro  
100 105 110  
Asp Val Gly Gly Lys Gln Glu Asp Phe Arg Val Glu Leu His Ser Asn  
115 120 125  
Leu Ser Ala Ala Ser Thr Met  
130 135

<210> 87  
<211> 257  
<212> PRT  
<213> Homo sapiens

<400> 87  
His Pro Ser Ala Pro Arg Ala Gly Lys Ala His Leu Lys Arg Ala Ile  
1 5 10 15  
Leu Gly Gln Glu Glu Ala Leu Arg Leu His Ala Leu Cys Arg Val Leu  
20 25 30  
Arg Glu Val Asp Leu Leu Arg Ala Val Ile Ser Gln Thr Leu Gln Arg  
35 40 45  
Ser Leu Ala Lys Tyr Ala Glu Leu Asp Arg Glu Asp Asp Phe Cys Glu  
50 55 60  
Ala Ala Glu Ala Pro Asp Ile Gln Pro Lys Thr His Gln Lys Pro Glu  
65 70 75 80  
Ala Arg Met Pro Arg Leu Ser Gln Gly Lys Gly Pro Asp Ile Phe His  
85 90 95

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Arg Leu Gly Pro Leu Ser Val Phe Ser Ala Lys Asn Arg Trp Arg Leu
      100                      105                      110
Val Gly Pro Val His Leu Thr Arg Gly Glu Gly Gly Phe Gly Leu Thr
      115                      120                      125
Leu Arg Gly Asp Ser Pro Val Leu Ile Ala Ala Val Ile Pro Gly Ser
      130                      135                      140
Gln Ala Ala Ala Ala Gly Leu Lys Glu Gly Asp Tyr Ile Val Ser Val
      145                      150                      155                      160
Asn Gly Gln Pro Cys Arg Trp Trp Arg His Ala Glu Val Val Thr Glu
      165                      170                      175
Leu Lys Ala Ala Gly Glu Ala Gly Ala Ser Leu Gln Val Val Ser Leu
      180                      185                      190
Leu Pro Ser Ser Arg Leu Pro Ser Leu Gly Asp Arg Arg Pro Val Leu
      195                      200                      205
Leu Gly Pro Arg Gly Leu Leu Arg Ser Gln Arg Glu His Gly Cys Lys
      210                      215                      220
Thr Pro Ala Ser Thr Trp Ala Ser Pro Arg Ala Leu Leu Asn Trp Ser
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Arg Lys Ala Gln Gln Gly Lys Thr Gly Gly Cys Pro Ser Pro Val Pro
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Gln

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<210> 88
<211> 84
<212> PRT
<213> Homo sapiens

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<220>
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<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

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<400> 88
Val Ser Arg Arg Gln Ala Arg Arg Met Val Thr Glu Thr Ser Arg Arg
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Arg Arg Ile Gln Glu Leu Glu Glu Arg Arg Arg Xaa Phe Val Glu Ala
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Cys Arg Ala Arg Glu Ala Ala Phe Asp Ala Glu Tyr Gln Arg Asn Pro
      35          40          45
His Arg Val Asp Leu Asp Ile Leu Thr Phe Thr Ile Ala Leu Thr Ala
      50          55          60
Ser Glu Val Ile Asn Pro Leu Ile Glu Glu Leu Gly Cys Asp Lys Phe
      65          70          75          80
Ile Asn Arg Glu

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100



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<400> 92
Met Leu Asn Phe Leu Trp Gly His Ser Leu Ile Val Pro Ala Ala Ala
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Thr Gly Ala Ser Leu Glu Ala Ala Cys Ala Lys Thr Thr Gln Leu Ser
          20          25          30

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1                      5                      10                      15  
 Tyr His Phe Asn Leu Leu Lys Ile Ser Val Phe Leu Leu Phe Phe Cys  
                             20                      25                      30  
 Cys His Cys Gln Ser Ala Ile Phe Phe Thr Ile Leu Leu Lys Tyr Tyr  
                             35                      40                      45  
 Cys Leu Leu Tyr Leu Phe Asn Val His Ile Leu Lys Lys Ser Ser Leu  
                             50                      55                      60  
 Tyr Glu Leu Phe  
                             65

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 <211> 63  
 <212> PRT  
 <213> Homo sapiens

<400> 97  
 Met Ser Tyr Phe Gln Ser Cys Ala Leu Asn Gln Ser Trp His Thr Gly  
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 Ser Val Tyr Ile Lys Phe His Leu Ala Thr Asp Gly Gln Lys Ile Glu  
                             20                      25                      30  
 Met Pro Ser Tyr Gly Glu Tyr Phe Ser Phe Lys Lys Leu Lys Arg Leu  
                             35                      40                      45  
 Ile Ile Leu Lys Lys Lys Asn Arg Pro Thr Arg Pro Asp Tyr Met  
                             50                      55                      60

<210> 98  
 <211> 75  
 <212> PRT  
 <213> Homo sapiens

<400> 98  
 Ile Arg His Glu Ser Leu Phe Ile Glu Gly Val Ser Gly Cys Ser Leu  
                             1                      5                      10                      15  
 Leu Ser Ala Glu Thr Leu Ser Cys Pro Cys Ser Leu Val Trp Asn Gly  
                             20                      25                      30  
 Ser Arg Val Thr Val Lys Glu Leu Asn Leu Pro Thr His Pro His Cys  
                             35                      40                      45  
 Ser Arg Leu Arg Leu Ala Asp Leu Leu Ile Ala Glu Gln Glu His Ser  
                             50                      55                      60  
 Ser Lys Leu Arg Ala Pro Leu Thr Cys Tyr Ser  
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 <212> PRT  
 <213> Homo sapiens

<400> 99  
 His Phe Asn Pro Ala Val Ser Leu Ala

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<210> 100  
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<220>  
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<220>  
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<220>  
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 <222> (9)  
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<400> 100  
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<210> 101  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens

<400> 101  
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Ala Arg Glu Pro Ser Val Gly Gly Arg Trp Arg Val Ser Trp Tyr Glu  
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Arg Phe Val Gln Pro Cys  
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<400> 102  
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 <213> Homo sapiens

<400> 103  
 Ser Val Ile Glu Asn Gly Thr Asp Thr Gly  
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<210> 104  
 <211> 17  
 <212> PRT  
 <213> Homo sapiens

<400> 104  
 Leu Leu Gln Pro Ala Leu Ala His Gly Leu Ala Leu Gly Leu Val Ile  
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Ala

<210> 105  
 <211> 13  
 <212> PRT  
 <213> Homo sapiens

<400> 105  
 Thr Leu Gly Asn Ile Ser Gly Gly His Phe Asn Pro Ala  
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<210> 106  
 <211> 17  
 <212> PRT  
 <213> Homo sapiens

<400> 106  
 Val Ser Leu Ala Ala Met Leu Ile Gly Gly Leu Asn Leu Val Met Leu  
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Leu

<210> 107

<211> 46  
 <212> PRT  
 <213> Homo sapiens

<400> 107  
 Pro Tyr Trp Val Ser Gln Leu Leu Gly Gly Met Leu Gly Ala Ala Leu  
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 Ala Lys Ala Val Ser Pro Glu Glu Arg Phe Trp Asn Ala Ser Gly Ala  
                   20                  25                  30  
 Ala Phe Val Thr Val Gln Glu Gln Gly Gln Val Ala Gly Ala  
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<210> 108  
 <211> 17  
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<400> 108  
 Leu Val Ala Glu Ile Ile Leu Thr Thr Leu Leu Ala Leu Ala Val Cys  
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 Met

<210> 109  
 <211> 10  
 <212> PRT  
 <213> Homo sapiens

<400> 109  
 Gly Ala Ile Asn Glu Lys Thr Lys Gly Pro  
   1                  5                  10

<210> 110  
 <211> 17  
 <212> PRT  
 <213> Homo sapiens

<400> 110  
 Leu Ala Pro Phe Ser Ile Gly Phe Ala Val Thr Val Asp Ile Leu Ala  
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<210> 111  
 <211> 27  
 <212> PRT  
 <213> Homo sapiens

<400> 111  
 Gly Pro Val Ser Gly Gly Cys Met Asn Pro Ala Arg Ala Phe Gly Pro  
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 Ala Val Val Ala Asn His Trp Asn Phe His Trp  
           20                  25

Protein 35000

<400>	114															
Phe	Pro	Gly	Arg	Pro	Thr	Arg	Pro	Glu	Val	Met	Met	Thr	Lys	Tyr	Ser	
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Asn	Leu	Ser	Leu	Glu	Ser	His	Asn	Phe	Ser	Leu	Thr	Ala	Ser	Pro	Leu	
			20					25					30			
Thr	Ser	Leu	Pro	Ile	Pro	Glu	Val	Met	Met	Thr	Lys	Tyr	Ser	Asn	Leu	
		35					40					45				
Phe	Leu	Glu	Ser	His	Asn	Ile	Ser	Leu	Thr	Glu	His	Ser	Ser	Val	Pro	
	50					55					60					
Val	Glu	Lys	Asn	Ile	Thr	Leu	Glu	Arg	Pro	Ser	Ala	Val	Glu	Leu	Thr	
65					70					75					80	
Cys	Gln	Phe	Thr	Thr	Ser	Gly	Asp	Val	Asn	Ser	Val	Asn	Val	Thr	Trp	
				85					90					95		
Lys	Lys	Gly	Asp	Glu	Gln	Leu	Lys	Asn	Tyr	His	Val	Ser	Ala	Thr	Glu	
			100					105					110			
Gly	Ile	Leu	Tyr	Thr	Gln	Tyr	Lys	Phe	Ser	Ile	Ile	Asn	Ser	Glu	Gln	
		115					120					125				
Leu	Gly	Ser	Tyr	Ser	Cys	Phe	Phe	Glu	Glu	Glu	Lys	Glu	Arg	Arg	Gly	
	130					135					140					
Thr	Phe	Asn	Phe	Gly	Val	Pro	Glu	Val	Gln	Arg	Lys	Asn	Lys	Pro	Leu	
145					150					155					160	

Ile Thr Tyr Val Gly Asp Ser Val Val Leu Val Cys Lys Cys Arg His  
 165 170 175  
 Cys Ala Pro Leu Asn Trp Thr Trp Tyr Ser Gly Asn Arg Ser Val Gln  
 180 185 190  
 Val Pro Leu Asp Val His Met Asn Glu Lys Tyr Ala Ile Asn Gly Thr  
 195 200 205  
 Asn Ala Asn Glu Thr Arg Leu Lys Ile Met Gln Leu Ser Glu Asp Asp  
 210 215 220  
 Lys Gly Ser Tyr Trp Cys His Ala Met Phe Gln Leu Gly Glu Ser Gln  
 225 230 235 240  
 Glu Ser Val Glu Leu Val Val Ile Ser Tyr Leu Val Pro Leu Lys Pro  
 245 250 255  
 Phe Leu Gly Ile Val Val Glu Val Ile Leu Leu Val Ala Ile Ile Leu  
 260 265 270  
 Phe Cys Glu Met His Thr Gln Lys Lys Lys Met His Met Asp Asp Gly  
 275 280 285  
 Lys Glu Phe Glu Gln Val Glu Gln Leu Lys Ser Asp Asp Ser Asn Gly  
 290 295 300  
 Ile Glu Asn Asn Ala Pro Arg His Arg Lys Asn Glu Ala Met Ser Gln  
 305 310 315 320

<210> 115  
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<400> 115  
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 35 40 45  
 Phe Leu Glu Ser His Asn Ile Ser Leu Thr Glu His Ser Ser Val Pro  
 50 55 60  
 Val Glu Lys Asn Ile Thr Leu Glu Arg Pro Ser Ala Val Glu Leu Thr  
 65 70 75 80  
 Cys Gln Phe Thr Thr Ser Gly Asp Val Asn Ser Val Asn Val Thr Trp  
 85 90 95  
 Lys Lys Gly Asp Glu Gln Leu Lys Asn Tyr His Val Ser Ala Thr Glu  
 100 105 110  
 Gly Ile Leu Tyr Thr Gln Tyr Lys Phe Ser Ile Ile Asn Ser Glu Gln  
 115 120 125

115 256 PRT Homo sapiens



Leu Gly Ser Tyr Ser Cys Phe Phe Glu Glu Glu Lys Glu Arg Arg Gly  
 130 135 140  
 Thr Phe Asn Phe Gly Val Pro Glu Val Gln Arg Lys Asn Lys Pro Leu  
 145 150 155 160  
 Ile Thr Tyr Val Gly Asp Ser Val Val Leu Val Cys Lys Cys Arg His  
 165 170 175  
 Cys Ala Pro Leu Asn Trp Thr Trp Tyr Ser Gly Asn Arg Ser Val Gln  
 180 185 190  
 Val Pro Leu Asp Val His Met Asn Glu Lys Tyr Ala Ile Asn Gly Thr  
 195 200 205  
 Asn Ala Asn Glu Thr Arg Leu Lys Ile Met Gln Leu Ser Glu Asp Asp  
 210 215 220  
 Lys Gly Ser Tyr Trp Cys His Ala Met Phe Gln Leu Gly Glu Ser Gln  
 225 230 235 240  
 Glu Ser Val Glu Leu Val Val Ile Ser Tyr Leu Val Pro Leu Lys Pro  
 245 250 255

<210> 116  
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<400> 116  
 Phe Leu Gly Ile Val Val Glu Val Ile Leu Leu Val Ala Ile Ile Leu  
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Phe

<210> 117  
 <211> 47  
 <212> PRT  
 <213> Homo sapiens

<400> 117  
 Cys Glu Met His Thr Gln Lys Lys Lys Met His Met Asp Asp Gly Lys  
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Glu Phe Glu Gln Val Glu Gln Leu Lys Ser Asp Asp Ser Asn Gly Ile  
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Glu Asn Asn Ala Pro Arg His Arg Lys Asn Glu Ala Met Ser Gln  
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<210> 118  
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<400> 118

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<212> PRT
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Lys Thr Thr Val Cys Ser Val Asn His Asp Ala Cys Leu Leu Val Lys
          20          25          30
Ala Asp Pro Lys Leu Phe Tyr Arg Gln Cys Trp Lys Phe Asp Asp Cys
          35          40          45
Ser Tyr Leu Ser Ile Ser Lys Ala Leu Gly Leu Lys Lys Leu Gln Tyr

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<400> 123  
Gly Phe Val Leu Asp Met Gly Phe Phe Glu Thr Ile Lys  
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<210> 124  
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 <213> Homo sapiens

<400> 124  
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 Ser Arg Asp Tyr Asp Val Glu Trp Gly Tyr Ala Phe Asp Val His Leu  
                   20                  25                  30  
 Asn Ala Phe Tyr Pro  
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 <213> Homo sapiens

<400> 125  
 Leu Thr Asp Thr Phe Ile Gly Tyr Phe Val Gly Asn  
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<210> 126  
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 <212> PRT  
 <213> Homo sapiens

<400> 126  
 Tyr Ser Ala Leu Pro Phe Leu Lys Asn  
   1                  5

<210> 127  
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 <212> PRT  
 <213> Homo sapiens

<400> 127  
 Ser Leu Ala Leu Gly Trp Asn Phe Thr His Thr Leu Cys Ser Phe Tyr  
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 Lys Tyr Arg Val Lys  
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<210> 128  
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<220>  
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Gln	Ser	Arg	Asp	Tyr	Asp	Val	Glu	Trp	Gly	Tyr	Ala	Phe	Asp	Val	His	
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Phe	Phe	Ile	Asn	His	Val	Ile	Leu	Thr	Asp	Thr	Phe	Ile	Gly	Tyr	Phe	
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